BRUHAT BANGALORE MAHANAGARA PALIKE

BYATARAYANAPURA DIVISION

YELAHANKA ZONE

MEASUREMENTS

Name of work:-

Improvements to roads and drains of veerannapalya in ward no.07 Byataranapura.

Est cost:- ~~15.00~~ lakhs

1) Steel - Nil
cement - 02-01-20
2) 40mm - 02.01.20
3) 20mm - 02.01.20
4) Sand - 02.01.20
5) Drain bottom - 16.01.2020 Nil
Side wall. 17.1. — Nil
Extra - Nil Nil

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BRUHAT BANGALORE MAHANAGARA PALIKE

MEASURMENT SHEETS

Name of the work :- Improvements to roads and drains of veerannapalya in ward no.07 Byataranapura.

Name of Agency : M/S KRIDL

Item No:- 1

Item name:- KSRRB 300-1. Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications.. Pg No.143.Item No.19.1)

SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6.00	7	8	9
	Date of Mreasurments							
	Veeranapalya							
	3rd Cross							
	CH 0.00m to 30.00m		2	30.00	1.10	0.90	59.40	
	CH 30.0m to 57.00m		2	27.00	1.10	0.90	53.46	
	3rd A Cross							
	CH 0.00m to 30.00m		1	30.00	1.10	0.90	29.70	
	CH 30.0m to 60.00m		1	30.00	1.10	0.90	29.70	
	CH 60.00m to 90.00m		1	30.00	1.10	0.90	29.70	
	CH 90.00m to 118.00m		1	28.00	1.10	0.90	27.72	
	4th cross							
	CH 0.00m to 30.00m		2	30.00	1.10	0.90	59.40	
	CH 30.0m to 60.00m		2	30.00	1.10	0.90	59.40	
	CH 60.00m to 90.00m		2	30.00	1.10	0.90	59.40	
	CH 90.00m to 120.00m		2	30.00	1.10	0.90	59.40	
	CH 120.00m to 150.00m		2	30.00	1.10	0.90	59.40	
	CH 150.00m to 180.00m		2	30.00	1.10	0.90	59.40	
	CH 180.00m to 210.00m		2	30.00	1.10	0.90	59.40	
	CH 210.00m to 237.00m		2	27.00	1.10	0.90	53.46	
	5th Cross							
	CH 0.00m to 30.00m		1	30.00	1.10	0.90	29.70	
	CH 30.0m to 58.00m		1	28.00	1.10	0.90	27.72	
	For Pit							
	3rd Cross		1	3.14*0.8*0.8		3.00	~~3.01~~ 1.51	
				4				
	3rd A Cross		1	3.14*0.8*0.8		3.00	~~3.01~~ 1.51	NDP DE(HQ)
				4				
	4th cross		1	3.14*0.8*0.8		3.00	~~6.03~~ 1.51	
				4				
	5th Cross		1	3.14*0.8*0.8		3.00	1.51	
				4				
	Over burden earth		1	13.00	1.60	1.10	22.88	
		cum			**Net Qty**		~~792.80~~ 785.27	

TT(b2) = (b)

Assistant Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

NDP DE(HQ)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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Item No:- 2								
Item name:-	KSRB 4-1.3: Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40mm and down size graded granite metal machine mixed, conrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification . (Pg.No.13, It.4.3)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6.00	7	8	9
Date of Mreasurments								
	RCC DRAIN-BOTTOM							
	Veeranapalya							
	3rd Cross							
	CH 0.00m to 30.00m		2	30	1.10	0.15	9.90	
	CH 30.0m to 57.00m		2	27	1.10	0.15	8.91	
	3rd A Cross							
	CH 0.00m to 30.00m		1	30	1.10	0.15	4.95	
	CH 30.0m to 60.00m		1	30	1.10	0.15	4.95	
	CH 60.00m to 90.00m		1	30	1.10	0.15	4.95	
	CH 90.00m to 118.00m		1	28	1.10	0.15	4.62	
	4th cross							
	CH 0.00m to 30.00m		2	30	1.10	0.15	9.90	
	CH 30.0m to 60.00m		2	30	1.10	0.15	9.90	
	CH 60.00m to 90.00m		2	30	1.10	0.15	9.90	
	CH 90.00m to 120.00m		2	30	1.10	0.15	9.90	
	CH 120.00m to 150.00m		2	30	1.10	0.15	9.90	
	CH 150.00m to 180.00m		2	30	1.10	0.15	9.90	
	CH 180.00m to 210.00m		2	30	1.10	0.15	9.90	
	CH 210.00m to 237.00m		2	27	1.10	0.15	8.91	
	5th Cross							
	CH 0.00m to 30.00m		1	30	1.10	0.15	4.95	
	CH 30.0m to 58.00m		1	28	1.10	0.15	4.62	
	Ramp in front of houses		37	4	0.45	0.15	9.99	
		cum			Net Qty		136.05	

Assistant Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

Clerk
10/1/2020

AE(WP) 10/1/2020

AE(WP)

Assistant Executive Engineer
Kodigehalli Sub-Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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Item No:- 4								
Item name:-		Providing TMT Steel Reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.(Page No.18, Item No.4.16.2)						
SL No	Particulars	Length, M	No	Length, M	Total length, M	Density, Kg/M	Quantity, Kg	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Veeranapalya							
	3rd Cross							
	Main Bars	0-30M	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		34	30.00	1020.00	0.39	397.80	
	Main Bars	30-	433	2.10	909.30	0.62	563.77	2 Sides
	Distribution Bars		36	27.00	972.00	0.39	379.08	
	3rd A Cross							
	Main Bars	0-30M	240	2.10	504.00	0.62	312.48	
	Distribution Bars		18	30.00	540.00	0.39	210.60	
	Main Bars	30-	240	2.10	504.00	0.62	312.48	
	Distribution Bars		18	30.00	540.00	0.39	210.60	
	Main Bars	60-90M	240	2.10	504.00	0.62	312.48	
	Distribution Bars		18	30.00	540.00	0.39	210.60	
	Main Bars	90-	225	2.10	472.50	0.62	292.95	
	Distribution Bars		18	28.00	504.00	0.39	196.56	
	4th cross							
	Main Bars	0-30M	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		34	30.00	1020.00	0.39	397.80	
	Main Bars	30-	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		36	30.00	1080.00	0.39	421.20	
	Main Bars	60-90M	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		34	30.00	1020.00	0.39	397.80	
	Main Bars	90-	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		36	30.00	1080.00	0.39	421.20	
	Main Bars	20-150M	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		34	30.00	1020.00	0.39	397.80	
	Main Bars	150-	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		36	30.00	1080.00	0.39	421.20	
	Main Bars	180-	480	2.10	1008.00	0.62	624.96	2 Sides
	Distribution Bars		34	30.00	1020.00	0.39	397.80	
	Main Bars	210-	433	2.10	909.30	0.62	563.77	2 Sides
	Distribution Bars		36	27.00	972.00	0.39	379.08	
	5th Cross							
	Main Bars	0-30M	240	2.10	504.00	0.62	312.48	
	Distribution Bars		18	30.00	540.00	0.39	210.60	
	Main Bars	30-	225	2.10	472.50	0.62	292.95	
	Distribution Bars		18	28.00	504.00	0.39	196.56	
							13209.31	
		Tonne				Total Quantity	13.209312	

Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

Assistant Executive Engineer
Kodigehalli Sub-Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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Item No:- 5								
Item name:-	Providing and removing Centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular slabs /side walls polygon in plan including cost of materials, labour complete as per specification and directions of the Engineer in charge.(Page No.16, Item NO.4.32)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6.00	7	8	9
Date of Mreasurments								
	SIDE WALL							
	Veeranapalya							
	3rd Cross					0.60	144.00	
	CH 0.00m to 30.00m		8	30.00		0.60	129.60	
	CH 30.0m to 57.00m		8	27.00				
	3rd A Cross					0.60	72.00	
	CH 0.00m to 30.00m		4	30.00		0.60	72.00	
	CH 30.0m to 60.00m		4	30.00		0.60	72.00	
	CH 60.00m to 90.00m		4	30.00		0.60	67.20	
	CH 90.00m to 118.00m		4	28.00				
	4th cross					0.60	144.00	
	CH 0.00m to 30.00m		8	30.00		0.60	144.00	
	CH 30.0m to 60.00m		8	30.00		0.60	144.00	
	CH 60.00m to 90.00m		8	30.00		0.60	144.00	
	CH 90.00m to 120.00m		8	30.00		0.60	144.00	
	CH 120.00m to 150.00m		8	30.00		0.60	144.00	
	CH 150.00m to 180.00m		8	30.00		0.60	144.00	
	CH 180.00m to 210.00m		8	30.00		0.60	129.60	
	CH 210.00m to 237.00m		8	27.00				
	5th Cross					0.60	72.00	
	CH 0.00m to 30.00m		4	30.00		0.60	67.20	
	CH 30.0m to 58.00m		4	28.00				
		sqm			Net Qty		1833.60	
					Qty Limited To		1727.40	N.D.D AE(Ele)

Assistant Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

N.D AE(Ele)

Assistant Executive Engineer
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Bangalore - 560 092

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Item No:- 3								
Item name:-	KSRB 4.2.2: Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.460 cum with superplastizers @ 3lts confirming to IS 9103-1999 RE affirmed - 2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, stair case lintels, retaining walls return walls, walls(anythickness) including attached plasters columns piers abutments pillars posts struts butresses string or lacing courses parapets copings, bed blocks , plain windows cills fillets etc., including cost of all materials labour HOM of machinery curing complete as per specifications. Seocifications No. KBS 4.1,4.6 (Page NO. 14, Item NO.							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6.00	7	8	9
Date of Mreasurments								
	Bottom							
	Veeranapalya							
	3rd Cross							
	CH 0.00m to 30.00m		2	30	0.90	0.15	8.10	
	CH 30.0m to 57.00m		2	27	0.90	0.15	7.29	
	3rd A Cross							
	CH 0.00m to 30.00m		1	30	0.90	0.15	4.05	
	CH 30.0m to 60.00m		1	30	0.90	0.15	4.05	
	CH 60.00m to 90.00m		1	30	0.90	0.15	4.05	
	CH 90.00m to 118.00m		1	28	0.90	0.15	3.78	
	4th cross							
	CH 0.00m to 30.00m		2	30	0.90	0.15	8.10	
	CH 30.0m to 60.00m		2	30	0.90	0.15	8.10	
	CH 60.00m to 90.00m		2	30	0.90	0.15	8.10	
	CH 90.00m to 120.00m		2	30	0.90	0.15	8.10	
	CH 120.00m to 150.00m		2	30	0.90	0.15	8.10	
	CH 150.00m to 180.00m		2	30	0.90	0.15	8.10	
	CH 180.00m to 210.00m		2	30	0.90	0.15	8.10	
	CH 210.00m to 237.00m		2	27	0.90	0.15	7.29	
	5th Cross							
	CH 0.00m to 30.00m		1	30	0.90	0.15	4.05	
	CH 30.0m to 58.00m		1	28	0.90	0.15	3.78	
	Side Wall							
	Veeranapalya							
	3rd Cross							
	CH 0.00m to 30.00m		4	30.00	0.15	0.60	10.80	
	CH 30.0m to 57.00m		4	27.00	0.15	0.60	9.72	
	3rd A Cross							
	CH 0.00m to 30.00m		2	30.00	0.15	0.60	5.40	
	CH 30.0m to 60.00m		2	30.00	0.15	0.60	5.40	
	CH 60.00m to 90.00m		2	30.00	0.15	0.60	5.40	
	CH 90.00m to 118.00m		2	28.00	0.15	0.60	5.04	
	4th cross						144.9	

25/5/05
Assistant Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

Assistant Executive Engineer
Kodigehalli Sub-Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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	CH		4	30.00	0.15	0.60	10.80	
	CH		4	30.00	0.15	0.60	10.80	
	CH		4	30.00	0.15	0.60	10.80	
	CH 90.00m to 120.00m		4	30.00	0.15	0.60	10.80	
	CH 120.00m to 150.00m		4	30.00	0.15	0.60	10.80	
	CH 150.00m to 180.00m		4	30.00	0.15	0.60	10.80	
	CH 180.00m to 210.00m		4	30.00	0.15	0.60	10.80	
	CH 210.00m to 237.00m		4	27.00	0.15	0.60	9.72	
	5th Cross							
	CH 0.00m to 30.00m		2	30.00	0.15	0.60	5.40	
	CH 30.0m to 58.00m		2	28.00	0.15	0.60	5.04	
		cum			Net Qty		240.66	

Item No:- 6	
Item name:-	Providing and fixing 10cms thick pre cast RCC covering slab using reinforced cement concrete M20 mix with stone aggregate 20mm and down size including centring shuttering reinforcement and bar bending machine mixed concrette laid in layers not exceeding 15 cm thick wellcompacted cost of all materials labour curing complete as per

SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6.00	7	8	9
	Date of Mreasurments							
	Covering Slab							
	Veeranapalya							
	3rd Cross							
	CH 0.00m to 30.00m		100		0.60	0.90	54.00	
	CH 30.0m to 57.00m		90		0.60	0.90	48.60	
	3rd A Cross							
	CH 0.00m to 30.00m		50		0.60	0.90	27.00	
	CH 30.0m to 60.00m		50		0.60	0.90	27.00	
	CH 60.00m to 90.00m		50		0.60	0.90	27.00	
	CH 90.00m to 118.00m		47		0.60	0.90	25.38	
	4th cross							
	CH 0.00m to 30.00m		100		0.60	0.90	54.00	
	CH 30.0m to 60.00m		100		0.60	0.90	54.00	
	CH 60.00m to 90.00m		100		0.60	0.90	54.00	
	CH 90.00m to 120.00m		100		0.60	0.90	54.00	
	CH 120.00m to 150.00m		100		0.60	0.90	54.00	
	CH 150.00m to 180.00m		100		0.60	0.90	54.00	
	CH 180.00m to 210.00m		100		0.60	0.90	54.00	
	CH 210.00m to 237.00m		90		0.60	0.90	48.60	
	5th Cross							
	CH 0.00m to 30.00m		50		0.60	0.90	27.00	
	CH 30.0m to 58.00m		47		0.60	0.90	25.38	
	Amruthalli Main Road							
	CH 0.00m to 30.00m		50		0.60	0.90	27.00	
	CH 30.0m to 60.00m		50		0.60	0.90	27.00	
	CH 60.00m to 90.00m		50		0.60	0.90	27.00	
	CH 60.00m to 90.00m		50		0.60	0.90	27.00	
	CH 90.00m to 120.00m		50		0.60	0.90	27.00	
	CH 120.00m to 150.00m		50		0.60	0.90	27.00	
	CH 150.00m to 180.00m		50		0.60	0.90	27.00	
	CH 150.00m to 173.00m		38		0.60	0.90	20.52	
		sqm			Net Qty		892.48	

Assistant Executive Engineer,
R.R. Nagar, Sub-division,
KRIDL, BBMP, Bangalore

Assistant Executive Engineer
Kodigehalli Sub-division
Bruhat Bangalore Mahanagara Palike
-5- Bangalore - 560 092

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Item No:- 7							
Item name:-	KSRRB M2900-2.1. Laying Reinforced cement concrete pipe NP2 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 B. 1200 mm dia MORTH Specification No. 1000,2300 Page No. 255, Item No.						
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		1			3.00	3.00
	3rd A Cross		1			3.00	3.00
	4th cross		1			3.00	3.00
	5th Cross		1			3.00	3.00
		mtr			Net Qty		12.00
Item No:- 8							
Item name:-	Providing 100mm and down size nominal size. (Pg No.I.Item No.23)						
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		1	(3.14x0.6*0.6)/4		1.20	0.34
	3rd A Cross		1	(3.14x0.6*0.6)/4		1.20	0.34
	4th cross		1	(3.14x0.6*0.6)/4		1.20	0.34
	5th Cross		1	(3.14x0.6*0.6)/4		1.20	0.33
		cum			Net Qty		1.35
Item No:- 9							
Item name:-	Providing 40mm and down size nominal size (Pg No.II.Item No.25)						
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		1	(3.14x0.6*0.6)/4		0.40	0.11 → 0.1130
	3rd A Cross		1	(3.14x0.6*0.6)/4		0.40	0.11
	4th cross		1	(3.14x0.6*0.6)/4		0.40	0.11
	5th Cross		1	(3.14x0.6*0.6)/4		0.40	0.11
		cum			Net Qty		0.45
Item No:- 10							
Item name:-	Providing 20mm and down size nominal size (Pg No.II.Item No.28)						
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		1	(3.14x0.6*0.6)/4		0.40	0.11
	3rd A Cross		1	(3.14x0.6*0.6)/4		0.40	0.11
	4th cross		1	(3.14x0.6*0.6)/4		0.40	0.11
	5th Cross		1	(3.14x0.6*0.6)/4		0.40	0.11
		cum			Net Qty		0.45

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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Item No:- 11							
Item name:-		Providing Fine aggrgate 2.36mm nominal size (Pg No.II.Item No.22)					
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		1	(3.14x0.6*0.6)/4		0.30	0.08
	3rd A Cross		1	(3.14x0.6*0.6)/4		0.30	0.08
	4th cross		1	(3.14x0.6*0.6)/4		0.30	0.08
	5th Cross		1	(3.14x0.6*0.6)/4		0.30	0.08
		cum			Net Qty		0.34

0.084

NDP AE

Item No:- 12							
Item name:-		Providing and fixing MS Grating 260x260 mm(Page No.1X, Sl No.234, code No.0771)					
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
	Veeranapalya						
	3rd Cross		2				2.00
	3rd A Cross		2				2.00
	4th cross		2				2.00
	5th Cross		2				2.00
		Nos			Net Qty		8.00

NDP AE

Item No:- 13							
Item name:-		KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/ sand/ kanker/ moorum. KSRRB M100-1:Placing tipper at loading point loading with front end loading, dumping turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 (Page 136, item No. 17.1)					
SL No	Particulars	Unit	Nos	L	B	D	Qty
1	2	3	4	5	6.00	7	8
Date of Mreasurments							
				Qty same as Item No 1			785.27
		cum			Net Qty		785.27

NDP AE

N.D.

Assistant Engineer
Ward No.07

5/3/2020

Assistant Executive Engineer
Kodigehalli Sub division

Assistant Executive Engineer
Byatarayanapura Division

Executive Engineer

Bruhat Bangalore Mahanagara Palike
Bangalore - 560 092

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